Lanthanide-Macrocycle Complexes as Chemical Sensors: Detection of an Aspirin Metabolite in Urine Using a Salicylurate-Specific Receptor Site

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Supporting Information

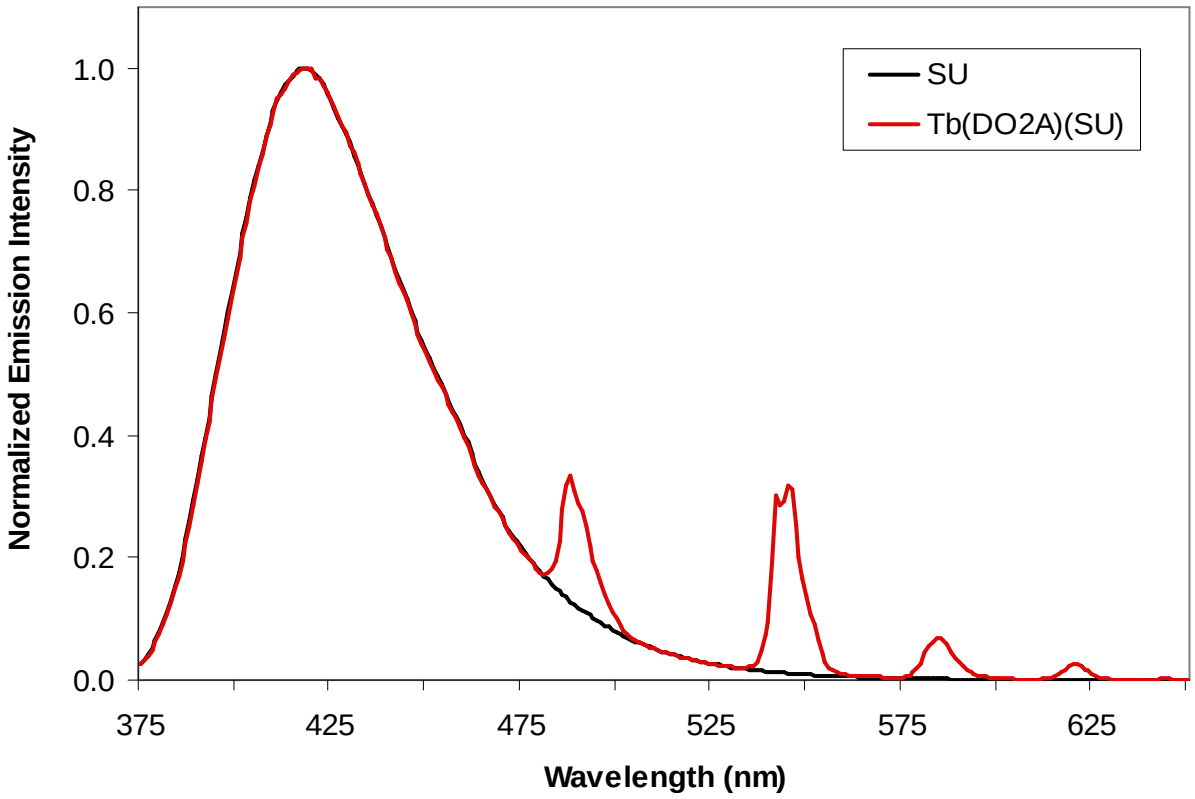

Figure S1. Normalized emission spectra of 120 μM SU and 50 μM Tb(DO2A)(SU) with tenfold excess DO2A in 0.1 M TAPS, pH 8.4 (λ_{ex} = 316 nm). The intrinsic SU luminescence band at 419 nm is unchanged upon complexation to the lanthanide binary complex.

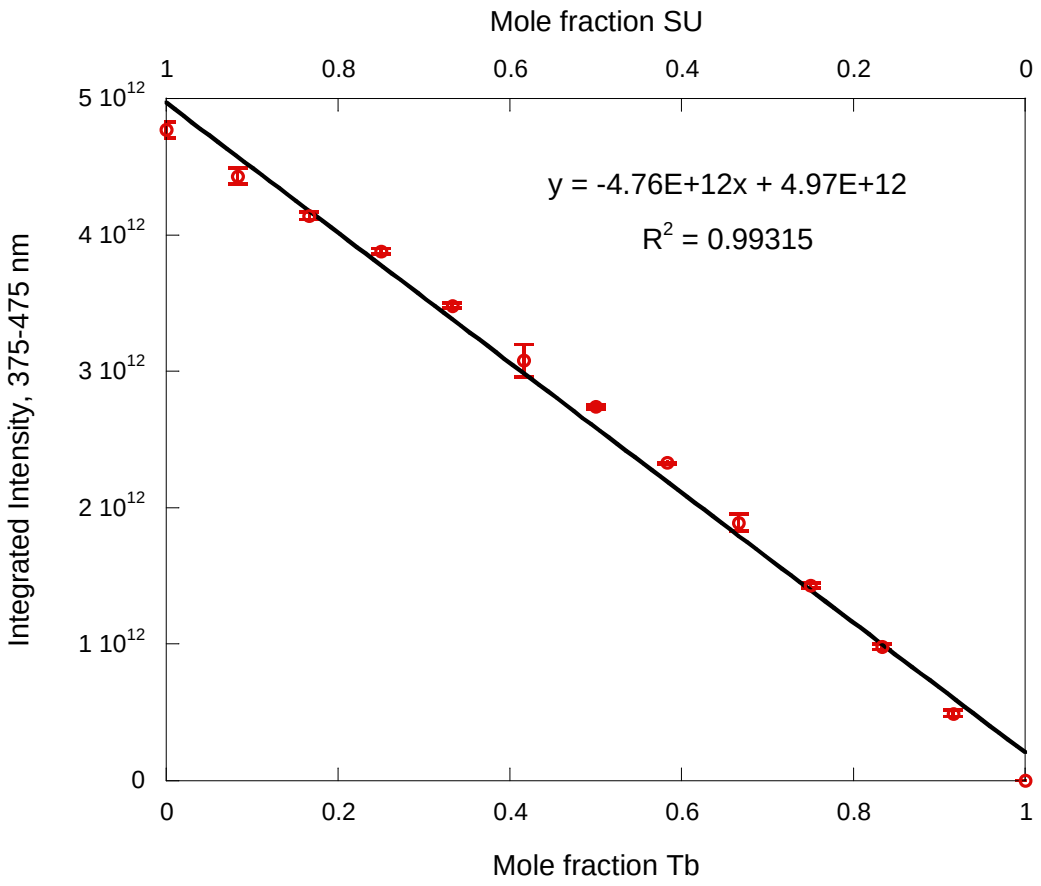

Figure S2. Method of continuous variations, showing linear correlation of intrinsic SU luminescence (419 nm) that can be used as an internal standard. Concentrations of Tb and SU were varied inversely from 0 to 120 μM in 10 μM increments, with 500 μM DO2A in 0.1 M TAPS, pH 8.4. λ_{ex} = 316 nm.

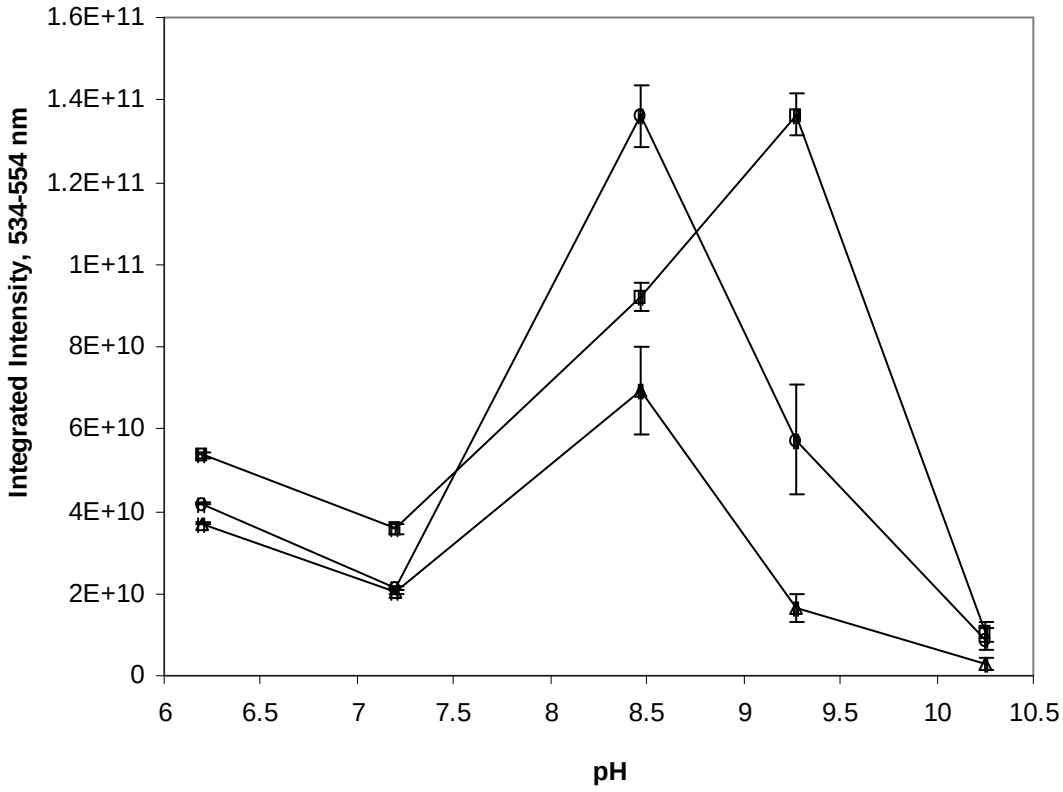

Figure S3. pH dependence study of Tb(DO2A)(SU)$^{-}$ complex, 100 μM with 5X excess DO2A. Emission spectra (λ_{ex} = 316 nm) obtained following 15 min (□), 18 hr (○) or 5 days (Δ) equilibration time.